

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

HONG et al.

Atty. Ref.: 2826-9

Serial No. unknown

Group:

Filed: January 17, 2002

Examiner:

For: METHOD AND APPARATUS FOR CUTTING A MULTI-LAYER SUBSTRATE  
BY DUAL LASER IRRADIATION

\* \* \* \* \*

January 17, 2002

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

In order to place the above-identified application in better condition for examination, please amend the application as follows:

**IN THE CLAIMS**

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

- 4) A method according to claim 1 wherein the substrate is composed of plural layers.
- 6) A method according to claim 4 wherein each said layer comprises different materials or combinations of materials.
- 8) A method according to claim 1 including the additional step of optically monitoring the cutting region, the cutting process being controlled in response to the said optical monitoring.
- 12) Apparatus according to claim 1 wherein the substrate is composed of plural layers.
- 14) Apparatus according to claim 9 wherein at least two of the said laser beams provide laser light having different parameters.
- 16) Apparatus according to claim 12 wherein each said layer comprises different materials or combinations of materials.
- 18) Apparatus according to claim 9 wherein beam splitter means are provided so that at least two laser beams are derived from the same laser source.

19) Apparatus according to claim 9 wherein optical monitoring means are provided for optically monitoring the cutting region, means being provided to control the cutting process in response to the said optical monitoring

**REMARKS**

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page(s) is captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:



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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

4) A method according to ~~any previous claim 1~~ wherein the substrate is composed of plural layers.

6) A method according to claim 4 or ~~claim 5~~ wherein each said layer comprises different materials or combinations of materials.

8) A method according to ~~any previous claim 1~~ including the additional step of optically monitoring the cutting region, the cutting process being controlled in response to the said optical monitoring.

12) Apparatus according to ~~any previous claim 1~~ wherein the substrate is composed of plural layers.

14) Apparatus according to ~~any of claims 9—13~~ wherein at least two of the said laser beams provide laser light having different parameters.

16) Apparatus according to ~~any of claims 12—15~~ wherein each said layer comprises different materials or combinations of materials.

18) Apparatus according to ~~any of~~ claims 9—17 wherein beam splitter means are provided so that at least two laser beams are derived from the same laser source.

19) Apparatus according to ~~any of~~ claims 9—18 wherein optical monitoring means are provided for optically monitoring the cutting region, means being provided to control the cutting process in response to the said optical monitoring